Toan Ly

**Lecture 5 Exercise**

**1)** f(x) follows an Exponential distribution

a)

b)

**2)**

**3)** Let be launch time in hours in 2-hour window

Within 10 minutes (or 1/6 hours) of the center of the launch window means the interval of interest is [5/6, 7/6]

**4)**

a)

b)

**Bonus)**

**1)**

**2)**

Let

Since which is similar to the above equation:

**3)**

Area =

Plug (2) into (1):